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ABSTRACT

An evaluation was conducted of the parent involvement program developed and provided by the Parent Institute for Quality Education (PIQE). The PIQE program provides information and support to inner city, minority parents through an eight-session program provided at the elementary and middle school levels. The evaluation focused on child outcomes, based on two separate but complementary analyses using data from two large, urban California school districts. From the first district, evaluators collected teacher reports of student classroom behaviors and parent-school contact, and parent self-reports of changes in knowledge, expectations, and behaviors. From the second district, official school records of attendance, grades and disciplinary actions were examined. Findings show that the effects of PIQE were largely limited to parents. Virtually all PIQE graduates reported substantial changes in their knowledge, attitudes, and behavior; however, teachers reported far less contact with parents than parents reported with teachers. Teacher reports of student behaviors showed no effects of parental PIQE attendance. There were no changes in student grades or behaviors. An analysis that included only Hispanic children revealed small, insignificant but consistent improvements in children's outcomes. (Contains 18 references.) (JPB)

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Supported by the
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RAND Education

PREFACE

Programs designed to improve children's educational outcomes by teaching parents to become more involved in their child's schooling are widely offered by school districts around the country. However, these programs are rarely evaluated rigorously enough for conclusions to be drawn about their ability to meet their goals. The evaluation reported in this document, supported by the Weingart Foundation and the Parent Institute for Quality Education, was based on data from two large school districts—outcome data from over 2,000 students in one district and interview data from the second—to evaluate a local parent involvement program.

This report should be of interest to providers of parent involvement programs, school district personnel, and others concerned about helping children to learn and the ways that parents can facilitate that process.

SUMMARY

As a society, we strongly believe that it is beneficial for parents to be involved in their children's education. The research literature also supports the value of parent involvement. For these reasons, programs designed to improve children's educational outcomes by teaching parents to become more effectively involved are widely offered by school districts around the country.

Most of the parent involvement programs are small, home-grown, and lack the resources or analytic expertise to conduct vigorous evaluations of program effects. A literature review conducted by Zellman et al. (forthcoming) reports that there are few formal evaluations of parent involvement programs, and many of these have limited value because outcome measures focus on changes in parental attitudes or behaviors rather than student behaviors. Of the few program evaluations that examine children's educational outcomes, most fail to find any positive program effects.

RAND undertook an evaluation of the parent involvement program developed and provided by the Parent Institute for Quality Education (PIQE) that focused on child outcomes. The PIQE program provides information and support to inner-city, minority parents through an eight-session program provided at the elementary and, more recently, middle school site.

PIQE's activities are geared to directly affect parents. PIQE classes aim to change parents' actions, including more communication with teachers and support for learning in the home. Changes in parents are a means to an end, and that end is improved educational behaviors among their children. The initial effects should be seen in students' daily activities, such as attendance and homework. Over the long term, the cumulative effect of better attendance and more attention to studies should improve achievement and grades. There may also be indirect effects of PIQE on teachers and schools in general.

The RAND evaluation is based on two separate but complementary analyses using data from two large, urban California school districts. From the first district we collected teacher reports of student classroom behaviors and parent-school contact, and parent self-reports of changes in knowledge, expectations, and behaviors. From the second district we obtained official school records of attendance, grades, and disciplinary actions from five elementary schools that included more than 2500 children.

These data were particularly suited for evaluating PIQE because they included a marker that identified students whose parents had completed PIQE and the time that they had done so.

Findings

The effects of PIQE were largely limited to parents. Virtually all PIQE graduates reported substantial changes in their knowledge, attitudes, and behavior since they began the program. For example, more than one-third indicated that PIQE participation had increased their involvement at school "a lot." However, teachers reported far less contact with parents than parents reported with teachers.

Teacher reports of student behavior such as attendance and performance reveal no effects of parental PIQE attendance in the first district. However, extremely high pre-program attendance rates among these elementary school children make it very difficult to find any PIQE-induced increases.

School record data in the second district produced similar findings. We found no pre-post changes in student grades or behaviors when comparing students whose parents had graduated from PIQE with those whose parents had not. Nor did attendance, on-time rates, or behavior grades vary by PIQE status.

An analysis that included only Hispanic children, whose parents were the original targets of the PIQE program, revealed that there were very small, nonsignificant but consistent improvements in pre-post outcomes between those children with a PIQE graduate parent and those without one.

Understanding the Findings

A number of factors may have limited our ability to detect PIQE program effects. First, we were able to measure only retrospectively many of the outcomes that PIQE emphasizes. We had to rely on parent and teacher recall to assess change over time. Second, effects may increase over time; our three-month post-program window in District One and the one-school-year window in District Two may have been too narrow to find them. Third, effects may be cumulative; as more parents participate, a critical mass may develop in a school that facilitates change. We did not sample schools that had been involved for multiple years. Fourth, PIQE participants and their children may be different from non-PIQE participants and their children in ways that bias the results.

For example, if the most effective parents with the best-performing children are more likely to participate in PIQE, there may be little more that PIQE can contribute.

Suggestions for Program Improvement

1) A teacher component should be added to PIQE. This component would at minimum formally introduce teachers to PIQE. In addition, PIQE might work more directly with teachers, giving them strategies for involving parents.

2) PIQE should more actively monitor assigned tasks. It appears, for example, that many parents did not obtain teacher signatures on forms saying that they had visited school, but were not held accountable for this in PIQE class.

3) PIQE should recognize that contact with the school and contact with the child's teacher are not the same, and place more emphasis on the latter. In our data we found that several parents reported increased visits to a parent resource room at school as a result of PIQE, but according to teacher reports these parents did not visit their child's classroom.

Toward a More Definitive Evaluation

The RAND evaluation was constrained by time and existing data limitations. A more definitive evaluation should include, at minimum, random assignment of interested parents to PIQE or to a comparison condition, and the collection of data in real time, over a much longer period.

Conclusions

Evaluating the effects of interventions like PIQE is very difficult. Research designs that eliminate threats to the validity of evaluations are extremely costly to implement and may be beyond both the capacity and mission of small, locally-developed programs.

Given this context, this evaluation went beyond the usual effort in using record data from more than 2500 students in one district and data from both parents and teachers in the other. The pattern of results—strong benefits reported by parents that are not validated by teachers' reports or record data—are not surprising given PIQE's focus on parents and the many limitations of the evaluation design. The fact that Hispanic PIQE children showed consistent, albeit slight gains post-PIQE is noteworthy.

The evaluation was clearly useful in identifying gaps in the PIQE program and ways to fill them. Unless adequate funds and time are available for true summative evaluations, we can expect no more from even our best programs and evaluations.

INTRODUCTION

As a society, we value parents' involvement in their children's education and believe that such involvement contributes to improved academic outcomes. The research literature also supports its value. At the elementary school level, a range of studies demonstrates an association between parent involvement and improved child outcomes. In particular, more parent involvement has been found to be associated with fewer behavioral problems (Comer, 1984), lower dropout rates (NCES, 1992), higher student achievement (Muller, 1993; Stevenson and Baker, 1987; Reynolds, 1992; Kohl, 1994: Klimes-Dougan et al., 1992), and increases in children's perceived level of competence (Wagner and Phillips, 1992).

The combination of these pre-existing beliefs in the value of parent involvement and research results that demonstrate an association between parent involvement and a variety of positive child outcomes have led policy makers and educators to assume that parent involvement *programs* will have the same salutary effects on student outcomes as parents who, independent of any program, involve themselves in their children's education. As a result, increasing parent school involvement has become one of the goals in the federal government's Goals 2000, and parent involvement programs devoted to improving children's outcomes may be found in schools of every type throughout the country.

Most parent involvement programs are small, home-grown, and lack the funds, expertise, or motivation to evaluate program effects. A literature review conducted by Zellman et al. (forthcoming) reports that most parent involvement programs that have conducted formal evaluations have limited their measures of program effects to changes in parental attitudes or behaviors (Ellis et al., 1983; Menard, 1993; Weidman and LeMahieu, 1985; Rubert, 1993; Siders and Sledjeski, 1978; Holden, 1990; Erwin and Mangano, 1981). While such changes may be necessary antecedents to changes in child outcomes, changes in child outcomes cannot be inferred.

Moreover, any changes in parental attitudes or behaviors are themselves suspect, since these self-reported changes were measured, in all but one instance, by post-program surveys limited to participating parents. The one program that surveyed participating and nonparticipating parent groups, both before and after the program

(Siders and Sledjeski, 1978), found no difference in frequency of reading activities at home (the program's focus) between the two groups after the program's completion.

Of the few program evaluations that examined educational outcomes (Siders and Sledjeski, 1978; Menard, 1993; Ellis et al., 1983; Swick and Land, 1984; Shuck, 1993), only one (Shuck, 1993) reported any effect on student outcomes. He found that a program that provided teaching material to parents and awarded points for work completed in class (to all children) and for work they did at home with a parent (to treatment children only) led to significantly improved reading levels for treatment children. Unfortunately, Shuck's evaluation design does not permit us to separate the effects of parent tutoring and the point system, leaving the explanation for the findings ambiguous.

Given the substantial human and financial resources devoted to parent involvement programs, a clearer picture of the outcomes of parent involvement programs seems essential.[1] Rigorous evaluations of these programs will help us to know what we can expect from parent involvement programs, which types are most successful, and what outcomes are reasonable to expect. Thus, we responded positively when the founder and executive director of the Parent Institute for Quality Education (PIQE) sought RAND's help in conducting an evaluation of its parent involvement program. The fact that PIQE had been operating since 1989 and had served more than 84,000 parents in 120 school districts through 1996 made the effort the more exciting.

PIQE Background

PIQE's underlying belief is that the most promising way to improve inner-city children's educational performance is by changing home and family. Consequently,

[1]Although there are no published figures on the total cost of parent involvement programs nationally, Title 1—which represents only a small fraction of the money allocated to such programs nationwide—will spend approximately $50 million on such programs this year. This figure is based on the recent requirement that any school district that receives more than $500,000 in federal Title 1 funds must spend one percent of those funds on parent involvement efforts. We used data from school year 1993-94, which showed that 1994 LEAs received over $500,000 that year, which accounted for $4.61 billion. Applying these figures to the current year, it is reasonable to expect that this one program will provide approximately $5 billion to schools that receive over $500,000 in funds. Therefore, Title 1 can be assumed to be spending $50 million on efforts to involve and educate parents this year.

PIQE established as its mission "to build strong parental involvement in a child's educational process at home. . . by forging a working partnership between parents and schools." The goal of the PIQE program is to teach parents how to become advocates for their children's education. If the program succeeds, PIQE believes, parents could have more of an impact on their child's education in the short and long term than typical programs targeted at inner-city minority youth.

Target Population

PIQE focuses on minority, inner-city youth, many of whose parents are immigrants. The program concentrates on this population because of the population's unique needs and the barriers that constrain the involvement of these parents. As an immigrant himself, the program's founder knew that immigrant parents often believe that they have little to contribute to their children's education. Such parents must be helped to understand that there is an important role for them to play. If parents come to believe this, and learn the skills that they need to help their children, he believes that they can become a powerful force for educational excellence for their own children and for others'.

PIQE delivers its program to schools that invite it. An invitation must include a willingness on the school's part to contribute to the cost of the program. This buy-in is viewed by PIQE as a way to ensure the school's careful consideration before inviting PIQE, and its cooperation once PIQE is on site.[2] In an effort to reduce the magnitude of the self-selection bias endemic to such programs, the Parent Institute mounts an aggressive recruitment campaign in each school community. Paid school community members contact every parent and encourage them to participate in the program.

Program Description

The PIQE program provides information and support to parents through an eight-week, eight-session parenting class. These 1.5-hour classes are available at the school site in both the mornings and the evenings, and are conducted by certified teachers in the language most comfortable for parents. The eight workshops, taught by

[2]The decision to invite PIQE to work in a school may be made by the principal, or by a committee comprised of teachers, parents, and others. While parent need is often the key consideration in a decision to invite PIQE, we were told that principals are often glad to be able to "contract out" a parent involvement effort that they are required or feel compelled to provide.

credentialed, PIQE-trained teachers, include an introductory session that solicits parent concerns and an elaborate graduation ceremony at the concluding session.[3] Between these two sessions are six informational sessions, each with specific goals and behavioral objectives, summarized below.

- The first session concentrates on providing parents with suggestions and ideas they can use to positively influence their child's self-esteem and motivation. Parents are exhorted to structure daily activities and monitor school work.

- The second session focuses on how discipline and communication in home and in the school are necessary conditions for the child to develop, grow, and mature as a healthy individual. Parents are encouraged to set rules and limits and set natural consequences when rules are broken.

- The third session teaches parents that they, too, are teachers of their children. This session focuses on the home as a social and educational setting. Parents are encouraged to provide a quiet study location and set a study time.

- The fourth session provides parents information on how the school system functions. They are encouraged to make regular visits to their child's classroom.

- The fifth session helps parents understand the causes and effects of drug use. Parents are encouraged to spend quality time with their child and encourage their child to express feelings without negative consequences.

- The sixth session focuses on higher education and career options available to their children and the steps parents must take to preserve these choices and make them accessible to their child. Parents of older children are encouraged to meet with their child's counselor to discuss college admission requirements.

PIQE believes this information will result in changes in participating parents' attitudes and behaviors toward their children and toward their children's education. These changes in the parents hopefully will lead to changes in four outcomes for participants' children: improved child attendance and retention in school; improved child performance in class and on homework; improved parent/child relationships; and increased parent and child motivation for postsecondary education.

[3]In order to graduate, a parent must attend four or more of the six substantive sessions.

EVALUATION DESIGN

PIQE's activities are geared to affect parents directly and children indirectly. Consequently, the first place to look for evidence of the success of the program is in parents' knowledge, attitudes, and behavior. Parents should acquire knowledge of parenting skills, school functioning, and ways to encourage and support children. Changes would also include parents' attitudes and expectations, particularly expectations for students' academic accomplishments and careers. Most importantly, PIQE classes are geared toward affecting parents' actions, including more communication with teachers, support for learning in the home, and establishment of rules for their children.

Changes in parents are a means to an end, and that end is improved educational behaviors among students. Thus, PIQE's impact should also be judged in terms of student behaviors. The initial effects should be seen in students' daily activities, such as attendance and homework. Parent encouragement and standards for behavior should also reduce undesirable student behavior at home and in school. Over the long term, the cumulative effect of better attendance and more attention to studies should be improved achievement and better grades.

There may also be indirect effects of PIQE on teachers and the school in general. As parents become more engaged with school, PIQE expects to see teachers becoming more familiar with parents, working more closely with parents, and developing a better understanding of student needs. As students develop better work habits, the expectation is that teachers will develop more positive attitudes toward students and increase their expectations of them.

The RAND evaluation is based on two separate but complementary analyses using data from two large, urban California school districts. Resource and time constraints severely restricted the evaluation's size and scope. From the first district we collected teacher reports of student classroom behaviors and parent-school contact, and parent self-reports of changes in knowledge, expectations, and behaviors. We focused on two elementary schools that had recently completed their first PIQE classes. Since the program in District One had ended before the evaluation began, we were forced to collect data only retrospectively. This same constraint precluded random assignment of parents to PIQE and comparison conditions. Cost constraints limited us to two District One schools.

From the second of the two districts we were able to obtain official school records of attendance, grades, and disciplinary actions from five elementary schools. We used these data because they enabled us to examine possible PIQE effects on far more students, although the number of outcome measures was limited. These data were particularly suited for evaluating PIQE because they included a marker that identified those parents who had completed PIQE and the time that they had done so. The analysis was also unusual in that it included data for more than 2500 children, a large number for an evaluation of a parent involvement program. We combined these two sets of data to create a multifaceted picture of PIQE and its effects.

DATA COLLECTION

District One Data

From District One, we selected two schools among those that first offered PIQE classes in Spring 1996 and that had graduated enough parents so that 25 percent of all students had parents who graduated from the program.[4] We selected the individual schools in consultation with district administrators who knew the schools well; they were asked to order the list by the degree to which each school represented the "typical" PIQE school. Of the top three candidate schools, we had one refusal, resulting in the first- and third-choice schools participating in the study.

From each of the two study schools, we randomly selected two to eight PIQE students and an equal number of non-PIQE students in all classes in grades one through six, for a total of 65 children of PIQE graduates and 60 other students in our study. We interviewed each of their teachers, and asked them to rate selected students' behavior on a number of dimensions in three marking periods that corresponded with the pre-, during- and post-PIQE periods.[5] Teachers were not informed of children's PIQE status. We also asked teachers about parent contacts and about their knowledge of PIQE.

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[4]We limited our evaluation to schools that received PIQE for the first time to control for both effects of a critical mass that might come from repeated administrations of the program, and to avoid confounding of secular effects with program outcomes that might occur if we included several years of PIQE.

[5]One teacher was out on long-term leave; we did not sample any students from her classroom.

We also attempted to contact all parent graduates, with approximately 25 percent both available and willing to participate in interviews. These interviews focused on their experiences with the program and their interactions with one of their children, who was selected at random from all their children attending the school in grades one through six. We asked parents about their behaviors in two time periods (before and since beginning PIQE) and about PIQE-induced changes in themselves and their children. We linked parent data (N=26) to the child's teacher's data. Although this analysis includes fewer students than the record data analysis that we did in District Two (described below), and therefore has less statistical power to detect differences in student behaviors, it is wider in scope, including teacher attitudes, parent contact, and parent opinions. Although these data have limitations, together the two data sources provide a much more diverse set of information than is generally available to such post-hoc evaluations.

District Two Data

We employed District Two record data from all district elementary schools that met two conditions: 1) they hosted their first PIQE classes in 1992-93 or 1993-94 and 2) at least 25 percent of their students had a parent who had graduated from the program (N=5). We sampled students in grades one through five during one of those two years. Using the program participation marker, we compared students whose parents completed the program (N=205) with students in the same schools whose parents did not graduate from PIQE (N=2525). This analysis was limited to the school year during which the parent participated in PIQE, and included only students who were enrolled in school both before and after the PIQE sessions. Student outcomes were limited to attendance, tardiness, and report card grades.

FINDINGS - DISTRICT ONE

Educational interventions as a group rarely produce large effects. Even interventions of substantial scope that are generally agreed to facilitate student performance, e.g., one-third reduction in class size, substantial increases in funding per student, have not been found to produce significant differences in student outcomes in many cases. Hence, we expected that we would not find strong effects of PIQE graduation on student outcomes. Indeed, any effects on student behavior from a brief program targeted exclusively to parents would be surprising and impressive. Some impact on parents, the target of the PIQE program, seemed far more likely.

Changes in Parent Attitudes and Behaviors

Virtually all parent graduates reported substantial changes in their knowledge, attitudes, and behavior. Most reported that PIQE participation increased their knowledge of and their expectations for their child, improved their parenting skills, and caused them to become more involved with the school, as shown in Table 1. Seventy-three percent of parents indicated that their PIQE participation substantially changed the way that they acted toward their children. Only eight percent said that PIQE had only a little or no effect.

Table 1
Parent Reports of Change Since PIQE
(Percent Indicating "A Lot") (N = 26)

	Percent	Frequency
How you act toward your children	73	19
Your children's involvement level at school	38	10
Involvement level in your children's education	65	17
Your idea of how far you think your children will go in school	73	19

We spoke only with PIQE parents, however, and do not know if such reported changes in behaviors occurred among non-PIQE parents as well. Additionally, because we interviewed only parents who volunteered to speak with us, we do not know if our small sample of parents is representative of other PIQE graduates at our sampled schools, much less all other graduates.

We also asked parents to tell us how many times they had done a variety of things during two different time periods: the period that began when school started in September 1995 and ended at Christmas break the same year (Time 1), and the period that began when classes resumed in January 1996 to the interview date (March 1996) (Time 2). The first time period was pre-PIQE (Time 1) and the second included both during and after PIQE. Identical questions were asked in widely separated parts of the interview.

The data indicate that on virtually every indicator of positive behavior,[6] parents reported higher frequencies since PIQE participation, as shown in Table 2. The data indicate that parents believe that they increased both their involvement at school and the frequency of behaviors associated with better child outcomes, such as reduced TV-watching on school days.

Table 2

Parent Reports of Their Behaviors, by Time Period

	Before PIQE (Time 1)	Since PIQE (Time 2)
School Involvement		
Number of times visited selected child's classroom	2.7[1]	3.1
Number of times volunteered in selected child's classroom	0.3	0.7
Number of times visited parent center at school	2.2	3.2
Parenting Behaviors		
Time set aside for homework[2]	0.6	0.8
Frequency of thoughts about performance as a parent[3]	3.5	3.7
Number of hours selected child watches TV on school day	2.4	1.7
How you rate yourself as a parent[4]	2.6 (OK)	1.9 (pretty good)
Frequency of yelling when selected child misbehaves	3.0 (several times a week)	2.2 (several times a month)
How far selected child will go in school[5]	3.3 (some college)	4.1 (college grad.)

[1] Cell entries are means unless otherwise noted.

[2] 0 = no, 1 = yes.

[3] 1 = almost never or never, 2 = several times a month, 3 = several times a day, 4 = every day.

[4] 1 = very good, 2 = pretty good, 3 = OK, 4 = not too good, 5 = not good at all.

[5] 1 = no high school graduation, 2 = high school graduation, 3 = some college or other training, 4 = college graduate, 5 = post-college.

[6] We exclude behaviors such as calling/sending notes to the teacher, since they often signal problem behaviors.

Teacher Reports of Change

For the most part, teacher and parent reports of classroom contact did not agree. Indeed, the correlation between teacher and parent measures of number of parent visits to the classroom was only 0.2.

Each teacher was asked to describe child and parent behaviors for up to eight children in the classroom. They were not told whether a child's parent had participated in PIQE; although most (64 percent) knew that the program existed in their school, few teachers (23 percent) knew which children in their classroom had parents who participated in PIQE. The relatively large number of children assessed (N=65 and N=60 in the two schools included in our sample, respectively) and the fact that, unlike parents, teachers did not benefit directly from PIQE, makes these data the most reliable collected in District One.

Teachers were asked to rate a range of child and parent behaviors over three grading periods that corresponded to PIQE milestones and to the parents' two time periods: the first ran from the beginning of school until the winter break, the second extended from January until the end of the PIQE program, and the third extended from the beginning of the post-PIQE period to the study interview period.

As noted above, teachers have limited knowledge of PIQE. Nonetheless, most (73 percent) teachers told us that they believed that PIQE was helpful. This response probably reflects a strong belief among participating teachers that parent involvement is a good thing, rather than any particular knowledge of the PIQE program. In fact, nearly all (91 percent) agreed with the abstract statement, "parent involvement is necessary for children to learn."

More generally, teachers noted that parents seem less intimidated since PIQE, perhaps because coming to school for PIQE classes has made them feel more comfortable about coming on campus for other than problem visits. A few teachers in one of the two schools in which we interviewed were able to point to specific children who had benefited substantially because of their parents' participation in PIQE. For example, one child who was not doing well began to cope better emotionally as the parent became more interested in his progress.

Teachers' reports of parent visits to their classrooms revealed that PIQE parents were more likely to visit *prior to* PIQE participation, suggesting that more involved

parents may be more likely to sign up for PIQE in the first place. In both the comparison and the PIQE groups, reported classroom visits changed little from the pre- to the post-PIQE period, although the percentage of both groups visiting the classroom increased during Period 2 (see Table 3).

Table 3

Teacher Reports of Parent Behavior, by PIQE Status and Time Period

	Period 1 Pre-PIQE		Period 2 During PIQE		Period 3 Post-PIQE	
	Non-PIQE	PIQE	Non-PIQE	PIQE	Non-PIQE	PIQE
Any classroom visits	35*	52	50	62	38	49
Mean number of classroom visits	1.4	1.6	1.6	1.7	1.1	1.3
Any calls or notes from child's parent(s)	22*	25	22	35	17	23
Parent(s) somewhat or very involved in child's academic performance	88*	86	87	89	87	88

*Entries are percentages.

As shown in row 2, PIQE parents did not differ from non-PIQE parents in making calls or sending notes to the teacher. While there is a slight increase reported during PIQE (Time 2), the sample sizes are too small to attribute significance to this difference. Row 3 shows no effects of PIQE on teachers' assessments of parental involvement in the child's academic performance. Lack of change no doubt reflects very high levels of perceived involvement prior to PIQE (Time 1).

These findings, combined with the earlier finding of a low correlation between teacher and parent reports of classroom visits, suggest that the increased involvement that parents report may be manifesting itself outside the classroom in visits to the Parent Center or to the school itself. Indeed, parents' responses to open-ended questions support this interpretation. Several parents told us that since PIQE graduation, they came *into the building* when picking up their children after school, rather than waiting for them outside. Or, the entirely retrospective nature of our data collection may make it particularly difficult for teachers to remember which parents visited the classroom and when.

At least some of our student data are less threatened by the problems associated with retrospective data, as information about attendance and academic performance was drawn from contemporary records that teachers kept. Because attendance figures did not rely at all on teacher judgments, and data were available on more than 120 students, these data represent the study's best, most objective measure.

Table 4

Teacher Reports of Child Outcomes, by PIQE Status and Time Period

	Period 1 Pre-PIQE		Period 2 During PIQE		Period 3 Post-PIQE	
	Non-PIQE	PIQE	Non-PIQE	PIQE	Non-PIQE	PIQE
Attendance rate*	97	97	95	96	96	97
Performing academically at or above ability	88	88	78	89	76	85
Student behavior index**	18.7	19.1	18.9	19.4	19.2	19.8

*Attendance rate was calculated by dividing number of days attended by number of days enrolled. Any child who was not enrolled during all three periods- was excluded from the analysis.

**The index is based on six separate measures of behavior, including disruption in class, poor work habits, withdrawn, poorly motivated to achieve, copes well with failure, and is well organized. Total score is the sum of the ratings from the individual items. The total possible score was 30; high scores indicate better behavior.

As shown in Row 1 of Table 4, attendance levels did not vary by PIQE status and did not change over the three rating periods. High attendance rates at Time 1 make it very difficult to find any increases from PIQE, a phenomenon to which we return in the discussion of District Two data.

Row 2 of Table 4 presents much the same phenomenon: little change over time, but reports of decreased performance in both groups. The decline for PIQE students is less pronounced, but we are unable to determine whether this reflects the effects of PIQE, the possibility that the parents of higher-performing students are overrepresented in PIQE, or some combination of both.

Row 3 of Table 4 presents total score on a six-item behavioral index. Here, we find PIQE students rated slightly better in each time period, and a slight tendency toward improvement over time in both the non-PIQE and PIQE groups. Taken together, the data reported in Table 4 suggest little effect of PIQE on student outcomes in District One.

FINDINGS - DISTRICT TWO

Data from District Two echo those from District One. Overall, we found no pre-post changes in student grades or behaviors when comparing students whose parents had participated in PIQE with those whose parents had not. As shown in Table 5, grade point averages for reading and math did not differ by PIQE status. These results held as well when we looked at each grade level separately. Nor did attendance or on-time rates vary by PIQE status. We also compared report card marks on ten behavioral categories that loaded on a single factor, including begins work promptly; completes work on time; works independently; follows directions; listens attentively; does neat, careful work; classroom behavior; playground behavior; respects other's rights; and shows self-discipline. We find the same pattern of nonresults for behavior grades. Tiny pre-PIQE differences between non-PIQE and PIQE children are maintained post-PIQE, but the data suggest that parental PIQE participation did not influence this process.

Since PIQE's mission is particularly relevant to immigrant parents, we wanted to examine whether PIQE program effects might be stronger for this group. Since there was no way to identify immigrants in the District Two data set, we simply divided the sample into two groups, Hispanic and non-Hispanic, on the basis of an available child race/ethnicity marker.

Table 5
Report Card Grades and Behavior, by PIQE Status and Time Period

	Pre-PIQE		Post-PIQE	
	Non-PIQE	PIQE	Non-PIQE	PIQE
Math grade[1]	3.4	3.3	3.5	3.4
Reading grade[1]	3.3	3.2	3.9	3.8
Attendance rate[2]	0.96	0.97	0.95	0.96
On-time arrival rate[3]	0.98	0.97	0.98	0.97
Behavior grade[4]	2.3	2.2	2.1	1.9

[1]Five-point scale, with 5 = outstanding and 1 = unsatisfactory.
[2]Percentage of days in attendance.
[3]Percentage of days on-time arrival.
[4]Five-point scale, with 5 = excellent and 1 = unsatisfactory.

As shown in Table 6, we found that among the Hispanic children, there were very small, nonsignificant but consistent differences in pre-post outcomes between those

children with a PIQE graduate parent and those without one. Comparing pre-PIQE and post-PIQE math, reading, and composite behavior grades as well as attendance, we found that on each measure, PIQE children had improved slightly more. There were no such effects for non-Hispanic (mostly African-American) students.

Table 6
Report Card Grades and Behavior, by Time Period, PIQE Status, and Ethnicity/Race

	Pre-PIQE			Post-PIQE			Pre-post difference
	Non-PIQE	PIQE	Difference	Non-PIQE	PIQE	Difference	
Hispanics	(N=713)	(N=176)					
Math grade[1]	3.26	3.31	-.05	3.25	3.34	-.09	.04
Reading grade[1]	2.95	3.09	-.14	3.47	3.76	-.29	-.15
Behavior[2]	3.66	3.81	-.15	3.84	4.08	-.24	-.09
Attendance[3]	0.95	0.97	-.02	0.93	0.96	-.03	-0.1

[1]Five-point scale, with 5 = outstanding and 1 = unsatisfactory.
[2]Five-point scale, with 5 = excellent and 1 = unsatisfactory.
[3]Percentage of days in attendance.

Understanding the Findings

These findings reveal that PIQE is having some positive effects on participating parents, but no significant effects on their children. Nor does it appear to have any effect on teachers; many did not know of it, and most who did had heard about it from other school staff, not from parents, who were expected to visit their child's classroom. However, a number of factors may have affected our ability to detect PIQE program effects:

1) We were able to measure only retrospectively many of the outcomes that PIQE emphasizes. We had to rely on parent and teacher recall to assess change over time.

2) It may be that effects increase over time; our three-month post-program window in District One and the one-school-year window in District Two may have been too narrow to find them.

3) Effects may be cumulative; as more parents participate, a critical mass may develop in a school that facilitates change. We did not sample schools that had been involved for multiple years.

4) PIQE participants and their children may be different from non-PIQE participants and their children in ways that bias the results. For example, if the most effective parents with the best-performing children are more likely to participate in PIQE, there may be little more that PIQE can contribute.

5) The measures we used may not be sensitive enough. In particular, many parents had difficulties offering *different* answers to the same questions asked for the pre-PIQE and the post-PIQE period. We note as well that parent and teacher recall appears to be faulty, even for the most recent three-month period.

Suggestions for Program Improvement

Our evaluation points to several suggestions for program improvements.

1) A teacher component should be added to PIQE. This component would at minimum formally introduce teachers to PIQE. In addition, PIQE might work more directly with the teachers. We found that virtually all teachers believe that parent involvement is critical to student success, but more than half told us that their education and training had not prepared them to involve parents. PIQE could play an extremely valuable role here, giving teachers strategies for working with interested parents, and helping them support the PIQE program.

2) PIQE should more actively monitor assigned tasks in its parent classes. In particular, it appears that many parents did not obtain teacher signatures on forms saying that they had visited school, but were not held accountable for this in PIQE class. Strong accountability would encourage more parents to take crucial steps such as visiting their child's teacher and help teachers to remember that they did.

3) PIQE should differentiate between contact with school and contact with teacher, and place more emphasis on the latter. In our data we found that several parents reported increased visits to a parent resource room at school as a result of PIQE but according to teacher reports these parents did not visit their child's classroom. Because the parent resource rooms often are not staffed during the day, and because we believe that teachers are key to improved child outcomes,

parent visits to classrooms seem far more important. At the same time, more consideration should be given to helping parents who cannot come to school (because of transportation, child care, or work barriers) to become involved in their children's education.

Toward A More Definitive Evaluation

The RAND evaluation effort was constrained by a number of factors going in, particularly time and the limitations of existing data. We also learned a good deal in the course of our work that would inform a more definitive evaluation. Such an evaluation should have three key components that could not be integrated into the current design:

1) Random assignment of interested parents to PIQE or to a comparison condition. Our data show that PIQE students were performing better on some measures prior to the program than non-PIQE students, suggesting that, despite intensive recruitment, PIQE may attract atypical, more concerned parents or parents of better-performing children. However, our data do not enable us to assess the effects, if any, of self-selection. Lagged implementation of PIQE could accomplish random assignment.

2) Collect data in real time. Our fluent Spanish-speaking interviewers, all of whom had training in clinical psychology, reported that many parents had difficulties making the Time 1 to Time 2 comparisons that were necessary to measure change in a short-term study. Parents often would say, when asked later in the interview about Time 2, "I already answered that question." Interviewers attempted to differentiate the time periods both verbally and through use of a graphic aid, but they were concerned that parents continued to struggle. The low level of agreement between teachers and parents confirms the difficulties parents had and suggests that teachers may also have had difficulties remembering which parents came to visit when. Asking teachers and parents to keep weekly logs of specified activities would obviate these problems, but requires a longer-term study and more resources.

3) Finally, we found distinct differences in parent behaviors between the two schools that we studied in District One. In the lower-income school, more parents came to school because far fewer parents were employed. In the higher-income school, parents told us that they had great difficulties coming in because

many were small business owners who worked very long hours. These parents may well be involved, but such involvement must of necessity occur away from school. Subsequent work must focus more heavily on this possibility. PIQE might well be advised to consider this as well.

CONCLUSIONS

Determining the effects of educational interventions like PIQE is very difficult for a number of reasons. Parental self-selection into programs in particular may reduce the apparent effectiveness of good programs. Research designs that eliminate threats to the validity of evaluations are extremely costly to implement and may be beyond both the ability and mission of small, locally-developed programs.

Given this context, the evaluation that RAND conducted for PIQE goes beyond the usual effort in using record data from more than 2500 students in one district and data from both parents and teachers in the other. The pattern of results—strong benefits reported by parents that are not validated by teachers' reports or children's outcomes—is not surprising given PIQE's focus on parents and the many limitations of the evaluation design.

The evaluation was clearly useful in identifying gaps in the PIQE program and ways to fill them, e.g., more direct teacher involvement and more accountability for program participants. Unless adequate funds and time are available for true summative evaluation, we can expect no more from even our best programs and evaluations.

REFERENCES

Comer, J., Home-school relationships as they affect the academic success of children, *Urban Society, 16*, 1984, pp. 323-337.

Ellis, B. et al., *Implementation assessment of a parent involvement program and the relationship between level of implementation and child achievement*, paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada, 1983.

Erwin, B. and Mangano, N., *Parent involvement in the primary reading curriculum: One approach*, paper presented at the 9th Annual Meeting of the Southwest Regional Conference of the International Reading Association, San Antonio, TX, 1981.

Holden, M., *Recommendations for increasing parent involvement at Ryan Primary in Nelson County, Virginia*, U.S. Department of Education, ERIC document ED334014, 1990.

Klimes-Dougan, B., Lopez, J., Nelson, P., and Adelman, H., Two studies of low-income parents' involvement in schooling, *The Urban Review, 24*, 1992, pp. 185-202.

Kohl, G., *Correlates of parent involvement in urban elementary school children*, paper presented at the Annual Meeting of the American Psychology Association, Los Angeles, CA, 1994.

Menard, J., *Development and implementation of an integrated parent involvement program for regular and special education classes in preschool and kindergarten for home and school*, practicum report, Nova University, 1993.

Muller, C., Parent involvement and academic achievement: An analysis of family resources available to the child, in B. Schneider and J. Coleman (Eds.), *Parents, their children, and schools*. San Francisco: Westview Press, 1993, pp. 77-113.

National Center for Education Statistics (NCES), *A profile of American eighth-grade mathematics and science instruction*, technical report No. NCES-92-486. Washington, DC: U.S. Government Printing Office, 1992.

Reynolds, A., Comparing measures of parental involvement and their effects on academic achievement, *Early Childhood Research Quarterly, 7*, 1992, pp. 441-462.

Rubert, H., *The impact of a parent involvement program designed to support a first-grade reading intervention program*, doctoral dissertation, National-Louis University, 1993.

Shuck, A., Parents encourage pupils (PEP): An inner-city parent involvement reading project, *The Reading Teacher, 36(6)*, 1993, pp. 524-528.

Siders, M. and Sledjeski, S., *How to grow a happy reader: Report on a study of parental involvement as it relates to a child's attitudes and achievement in the acquisition of reading skills*, research monograph no. 27, Gainesville, FL: Florida University, 1978.

Stevenson, D. and Baker, D., The family-school relation and the child's school performance, *Child Development, 58*, 1987, pp. 1348-1357.

Swick, K. and Land, B., *The long-term influence of a kindergarten parent involvement program*, paper presented at the Southern Association on Children Under Six Annual Conference, Lexington, KY, March 1984.

Wagner, B. and Phillips, D., Beyond beliefs: Parent and child behaviors and children's perceived academic competence, *Child Development, 63*, 1992, pp. 1380-1391.

Weidman, J. and LeMahieu, P., *Parent involvement in children's out-of-school learning: The MAP-AT-HOME program*, paper presented at the 80th Annual Meeting of the American Sociological Association, Washington, DC, 1985.

Zellman, G., Stecher, B., Klein, S., McCaffrey, D., and Guess, G., *Parent involvement programs: Do they work?* unpublished manuscript, Santa Monica, CA: RAND, forthcoming.

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